

Remarks/Arguments

Reconsideration of this application is requested.

Requests for Continued Examination and Extension of Time

Request for continued examination (RCE) and a three month extension of time are enclosed in response to the final Office Action mailed on April 10, 2007, and Advisory Action mailed on August 9, 2007. The extended period for response expires on October 10, 2007.

Claim Status

Claims 1-4 and 8-24 were presented. Claims 1, 2, 8 and 17 are amended. Claims 21-24 are canceled without prejudice. New claims 25-28 are added. Thus, claims 1-4, 8-20 and 25-28 are now pending.

Claim Rejections – 35 USC 103(a)

Claims 1-4 and 8-24 are rejected under 35 USC 103(a) as obvious over Zakurdaev (US 2002/007318) in view of Gong (US 2001/0044819) and Beyda (US 7,120,927). In response, applicant respectfully traverses the rejections and amends independent claims 1, 2, 8 and 17 to distinguish over all references of record.

In the present invention, first and second held TCP/IP connections are established with a relay server. Data is relayed between the first and second network devices via the relay server using the respective first and second held TCP/IP connections in accordance with connection demand information. Importantly, a connection holding command is periodically received at the relay server via a held TCP/IP connection and a response is returned to the network device that sent the connection holding command. As disclosed in paragraph 0027 and FIG. 2, the connection holding command maintains and holds the TCP/IP connections between a network device and relay server. Zakurdaev does not operate in this manner.

Zakurdaev is cited for disclosing the delivery and loading of an IP address of a user-selected Internet Service Provider (ISP) into the user terminal so that the user terminal can access the Internet through the ISP. Zakurdaev simply transmits

a command and receives a response and does not teach applicant's connection holding command. In particular, a user terminal 316, 324 or 336 transmits a request for an IP address (DHCPDISCOVER signal) to a gateway device 312 which then forwards the DHCPDISCOVER signal to the Network Operations Center (NOC) 304. Once the proper ISP is determined, NOC 304 forwards the DHCPDISCOVER signal to the proper ISP (i.e. 344, 348 or 352). The ISP responds with a DHCPOFFER signal, including the IP address of the ISP, which is forwarded to NOC 304, to gateway device 312 and finally to the user terminal where it is automatically loaded (paragraphs 0044-0046).

The DHCPDISCOVER signal is merely an IP address request that has no bearing on the maintenance and holding of a connection between a user terminal 316, 324 or 336 and a NOC 304. Periodic IP address requests are unnecessary once obtained the first time and therefore, an IP address request is not periodically transmitted. Thus, there is no disclosure or suggestion in Zakurdaev that a held TCP/IP connection is maintained and held between ISPs 344, 348 or 352 and gateway device 312 by connection holding command originating periodically from a user terminal. The ancillary references do not remedy the deficiencies of Zakurdaev. Gong discloses an unsigned Java applet and Beyda is directed to e-mail alias registration.

Independent claims 1, 2, 8 and 17 are amended to emphasize this distinguishing feature of a connection holding command that is periodically received and a response that is communicated to the network device that sent the connection holding command to maintain the held TCP/IP connection. As a result, the connections can be maintained when data is not being transmitted.

Since Zakurdaev, Beyda and Gong do not teach or suggest each and every element of claims 1, 2, 8 and 17, it cannot render those claims or claims dependent thereon obvious. The rejections under 35 USC 103(a) should be withdrawn.

New Claims

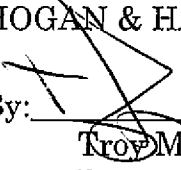
New claims 25-28 are directed to additional novel features of the present invention that are neither disclosed nor suggested by any of the references of record. New dependent claims 25-28 are directed to paragraphs 0034, 0035 and FIG. 2 of the specification. A releasing notification transmitted by a network device indicates that the held TCP/IP connections are vacant connections that are not used in the relay communication between network devices.

Conclusion

This application is now in condition for allowance. The Examiner is urged to contact the undersigned to resolve any issues that remain after entry of this amendment. Any fees due with this response may be charged to our Deposit Account No. 50-1314.

Respectfully submitted,
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Date: October 9, 2007

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